


CE				RCC	
EU	Germany	Czech	Ukraine	South Africa	USA
					

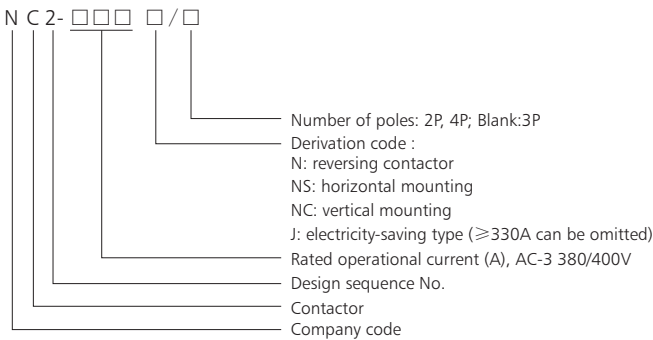
### NC2 Contactor, 115~630A

## 1. General

- 1.1 Certificates: CE, VDE, ESC, UKRTEST, RCC, UL.
- 1.2 Electric ratings; AC50/60Hz, up to 1000V, up to 630A;
- 1.3 Application: remote making & breaking circuits; protect circuit from overload when assembling with thermal over-load relay;
- 1.4 Ambient temperature: -5°C~+40°C;
- 1.5 Altitude: ≤2000m;
- 1.6 Mounting category: III;
- 1.7 Mounting conditions: inclination between the mounting plane and the vertical plane not exceed ±5° ;
- 1.8 Standard: IEC/EN 60947-4-1.



## 2. Type Designation



## 3. Terminal Connection

Model	Cabling(Cu)			Screw size	Tightening torque (N • m)
	Number of piece	Cable Cross section(mm <sup>2</sup> )	Cu busbar Cross section(mm <sup>2</sup> )		
NC2-115	1	70	-	M6	3
NC2-150	1	70	-	M8	6
NC2-185	1	120	-	M8	6
NC2-225	1	120	-	M10	10
NC2-265	1	185	-	M10	10
NC2-330	1	240	-	M10	10
NC2-400	1	240	-	M10	10
NC2-500	2	185	40×5	M10	10
NC2-630	2	240	50×5	M12	14

#### 4. Technical Data

★ 3P contactors AC coil operation

Model			NC2-115	NC2-150	NC2-185
Frame			Frame 1		Frame 2
Rated Conventional heating current (A) AC-1			200	200	275
Rated operational current (A)	AC-3 AC-4	380/400V AC	115	150	185
		660/690V AC	86	108	118
		1000V AC	46	50	71
Power of controlled 3-phase cage motor (AC-3)	kW	380/400V AC	55	75	90
		660/690V AC	80	100	110
		1000V AC	65	65	100
	hp	240V AC	40	50	60
		415V AC	60	75	100
		480V AC	75	100	100
600V AC	75	100	100		
Operating cycles (operations /h) AC-3			1,200	1,200	600
Electrical life ( $\times 10^6$ operations) AC-3			1.2	1.2	1
Mechanical life ( $\times 10^6$ operations)			10	10	6
Matched fuse type	Model		RT16-1	RT16-1	RT16-2
	Rated current A		200	225	315


★ 4P contactors AC coil operation

Model			NC2-115	NC2-150	NC2-185
Frame			Frame 1		Frame 2
Conventional heating current A			200	200	275
Rated operational current (A)	AC-3 AC-4	380/400V AC	115	150	185
		660/690V AC	86	108	118
		1000V AC	46	50	71
Power of controlled 3-phase cage motor (AC-3)	kW	380/400V AC	55	75	90
		660/690V AC	80	100	110
		1000V AC	65	65	100
	hp	240V AC	40	50	60
		415V AC	60	75	100
		480V AC	75	100	100
600V AC	75	100	100		
Operating cycles (operations /h) AC-3			1,200	1,200	600
Electrical life ( $\times 10^6$ operations) AC-3			1.2	1.2	1
Mechanical life ( $\times 10^6$ operations)			10	10	6
Matched fuse type	Model		RT16-1	RT16-1	RT16-2
	Rated current (A)		200	225	315

NC2-225	NC2-265	NC2-330	NC2-400	NC2-500	NC2-630
Frame 2	Frame 3	Frame 4	Frame 5	Frame 6	
275	315	380	450	630	800
225	265	330	400	500	630
137	170	235	303	353	462
90	112	155	200	232	331
110	132	160	200	250	335
129	160	220	280	335	450
100	147	160	185	335	450
75	100	-	-	-	-
125	150	-	-	-	-
125	150	-	-	-	-
125	150	-	-	-	-
600	600	600	600	600	600
1	0.8	0.8	0.8	0.8	0.8
6	6	6	6	6	6
RT16-2	RT16-2	RT16-3	RT16-3	RT16-4	RT16-4
315	355	450	560	750	950 (on request)

NC2-225	NC2-265	NC2-330	NC2-400	NC2-630
Frame 2	Frame 3	Frame 4	Frame 5	Frame 6
275	315	380	450	800
225	265	330	400	630
137	170	235	303	462
90	112	155	200	331
110	132	160	200	335
129	160	220	280	450
100	147	160	185	450
75	100	-	-	-
125	150	-	-	-
125	150	-	-	-
125	150	-	-	-
600	600	600	600	600
1	0.8	0.8	0.8	0.8
6	6	6	6	6
RT16-2	RT16-2	RT16-3	RT16-3	RT16-4
315	355	450	560	950 (on request)

### 5. Accessories




Items		Model	NC2-115	NC2-150	NC2-185	NC2-225
AC coil	Coil power	Start-up (VA)	660		966	
		Holding (VA)	54		66	
	Operation range	Pick-up voltage	(85%~110%) Us			
		Drop-out voltage	Common products; 20%~75%; electricity-saving products: 10%~75%Us			
Coil voltage (50Hz,60Hz, 50/60Hz)(V AC)			110,127,220,230,380,400			
F4 auxiliary contact						
F5 auxiliary contact			<p>F4 - □ □</p> <ul style="list-style-type: none"> <li>Number of N/C auxiliary contact</li> <li>Number of N/O auxiliary contact</li> <li>Auxiliary contact assembly</li> </ul> <p>F5 - □ □</p> <ul style="list-style-type: none"> <li>0: time-delay range, 0.1s~3s</li> <li>2: time-delay range, 0.1s~30s</li> <li>4: time-delay range, 10s~180s</li> <li>T: making time-delay;</li> <li>D: breaking time-delay</li> <li>Time-delay module</li> </ul>			

NC2-265	NC2-330	NC2-400	NC2-500	NC2-630
840	1,500	1,500	1,500	1,500
12	10	10	10	10

(85%~110%) Us

Common products; 20%~75%; electricity-saving products: 10%~75%Us

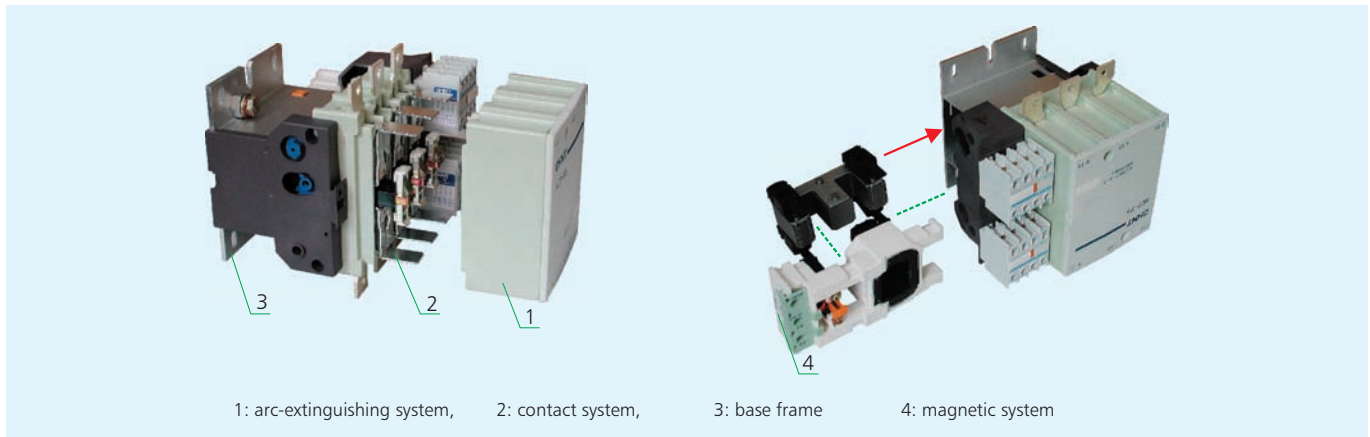
110,127,220,230,380,400

Model	Configuration of contacts		Picture
	Number of NO contact	Number of NC contact	
F4-20	2	0	
F4-11	1	1	
F4-02	0	2	
F4-40	4	0	
F4-31	3	1	
F4-22	2	2	
F4-13	1	3	
F4-04	0	4	
Model	Time-delay range	Configuration of time-delay contacts	Picture
F5-T0	0.1s~3s	N/O+N/C	
F5-T2	0.1s~30s	N/O+N/C	
F5-T4	10s~180s	N/O+N/C	
F5-D0	0.1s~3s	N/O+N/C	
F5-D2	0.1s~30s	N/O+N/C	
F5-D4	10s~180s	N/O+N/C	

## 6. Structure Features

The contactor is composed of arc-extinguishing system, contact system, base frame and magnetic system (including iron core, coil) The contact system of the contactor is of direct action type and double-breaking points allocation. The lower base-frame of the contactor is made of shaped aluminum alloy and the coil is of plastic enclosed structure. The coil is assembled with the amarture to be an integrated one. They can be directly taken out from or inserted into the contactor. It is convenient for user's service and maintenance.

Scheme of NC2-115~265 structure

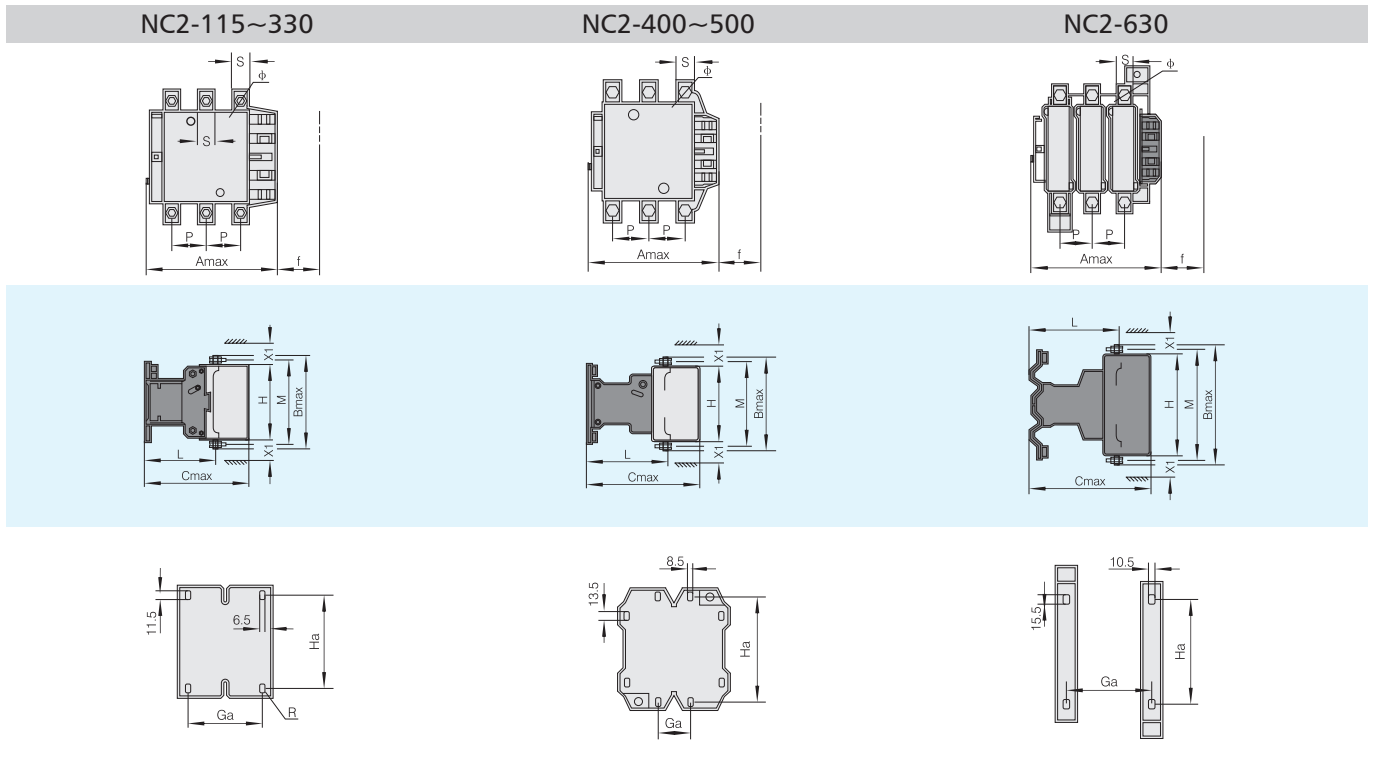


NC2 series contactor is of short arcing distance. For example, the arcing distance of NC2-115~330 contactor is only 10mm (200~500V), which is about one sixth that of the previous contactor of same capacity. It is an excellent complementary element used for an electric control device and it occupies smaller space in a complete set of equipment.

The mechanical interlock can be added to the contactor in both horizontal direction and vertical direction. Three sets of contactor can be interlocked in the vertical direction.

Model	NC2-115		NC2-150		NC2-185		NC2-225	
	3P	4P	3P	4P	3P	4P	3P	4P
A	167	204	167	204	171	211	171	211
B	163	163	171	171	174	174	197	197
C	172	172	172	172	183	183	183	183
P	37	37	40	40	40	40	48	48
S	20	20	20	20	20	20	25	25
Φ	M6	M6	M8	M8	M8	M8	M10	M10
f	131	131	131	131	131	131	131	131
M	147	147	150	150	154	154	172	172
H	124	124	124	124	127	127	127	127
L	107	107	107	107	113.5	113.5	113.5	113.5
X1 200~500V	10		10		10		10	
X1 660~1000V	15		15		15		15	
Ga	80		80		80		80	
Ha	110~120		110~120		110~120		110~120	



## 7. Overall and Mounting Dimensions (mm)



NC2-265		NC2-330		NC2-400		NC2-500	NC2-630	
3P	4P	3P	4P	3P	4P	3P	3P	4P
202	247	213	261	213	261	233	309	389
203	203	206	206	206	206	238	304	304
215	215	220	220	220	220	233	256	256
48	48	48	48	48	48	55	80	80
25	25	25	25	25	25	30	40	40
M10	M10	M10	M10	M10	M10	M10	M12	M12
147	147	147	147	147	147	150	181	181
178	178	181	181	181	181	208	264	264
147	147	158	158	158	158	172	202	202
141	141	145	145	145	145	146	155	155
10		10		15		15	20	
15		15		20		20	30	
96		96		80		80	180	240
110~120		110~120		170~180		170~180	180~190	

## 8. Assembly with overload relay

### 8.1 Assembly with thermal overload relay

Model of contactor	Assembled thermal overload relay			
	Model	Rated current (A)	Recommended fuse type	
			aM	gG
NC2-115 NC2-150 NC2-185 NC2-225	 NR2-200	80~125	125	200
100~160		160	250	
125~200		200	315	
NC2-185 NC2-225 NC2-265 NC2-330 NC2-400 NC2-500 NC2-630	 NR2-630	160~250	250	400
200~315		315	500	
250~400		400	630	
315~500		500	800	
400~630		630	800	